

REMARKS

Claims 1-31 and 33-43 are pending in this application. Applicant has amended claims 1-24 and cancelled claim 32.

In the Office Action, the Examiner rejected claims 1-43 under 35 U.S.C. Section 103(a) as being obvious over Goldberg (US Patent No. 3919938) or Ota (US Patent No. 3892568). Applicant respectfully traverses the rejection.

The present invention according to claim 1 will be explained, by way of example only, with reference to the drawings and specification. In one particularly preferred embodiment, the present invention is designed to be used as a printer (much like a laser printer or inkjet printer) for printing images on a rewritable media which is several paper sheets thick (see paragraph 24 of the present specification). As shown in FIGS. 1A and 1B, the printing device includes a transitioner 110 for lowering a viscosity of the electrophoretic particles contained in a recording medium so as to facilitate mobility of the electrophoretic particles. Imaging electrodes 130 are used to selectively provide an imaging electric field associated with a portion of the image to be formed in the recording medium. A transfer mechanism 150 such as a roller successively positions the imaging electrodes 130 near a portion of the recording medium such that the imaging electrodes form the entire image in an successive manner as the recording medium passes through. In other words, unlike the bulky prior art devices in which the entire image is reproduced simultaneously in a recording media, the present invention uses a transfer mechanism and imaging electrodes to successively form the image similar to the way an inkjet printer operates.

As can be appreciated, this feature provides many advantages. One advantage is that the printer can be made compact since only partial images are formed at any one time and it uses no dyes, toners or other consumables. Another advantage is that it can be reprogrammable to record different images simply by providing a different sequence of image pattern to the imaging electrodes.

This novel feature is recited in claim 1 as “*imaging electrodes* for selectively providing an imaging electric field associated with *a portion of the image . . .*” and “*transfer mechanism* adapted to position said imaging electrodes near a portion of the recording media *to allow said imaging electrodes to progressively form the image*” (emphasis added).

Applicant submits that none of the references teach or suggest a combination of a transfer mechanism and imaging electrodes to allow progressive formation of the image. Moreover, while the present invention uses electrophoretic particles that “migrate” due to the imaging electric field (see claim 1), the particles in Goldberg are anisotropic particles that

simply rotate to allow light to pass through (see left side of FIG. 1D for example). They do not migrate as required in claim 1. Thus, Applicant respectfully request withdrawal of the 103(a) rejection.

In addition, the dependent claims are distinguishable on their own. For example, claim 6 recites mixing electrodes (see element 120 in FIG. 1B and paragraph 17) that cause the electrophoretic particles to more homogeneously distribute in the suspension before being impinged upon by the electric field produced by the imaging electrodes. This feature is useful because it eliminates the “potential sticking problem” of electrophoretic particles during writing (see paragraph 17 of the present specification). None of the cited references teach or suggest such a novel feature.

Similarly, the features recited in dependent claims 2-5, 14 and 19-22 are novel by themselves and are not taught or suggested by the cited references. Because the Examiner did not specifically point out where in the cited references these feature are disclosed, Applicant is unable to respond fully to the rejection of these claims. Accordingly, in the next Office Action, Applicant respectfully requests the Examiner to distinctly point out specific parts of the cited references that disclose the features recited in these claims.

Dependent claims 7-13 which depend from claim 6 are allowable at least for the same reasons that claim 6 is allowable. Dependent claims 15-18 which depend from claim 14 are allowable at least for the same reasons that claim 14 is allowable.

Also, Applicant submits that dependent claims 2-22 are also patentable at least by virtue of their dependency from claim 1.

For the similar reasons as discussed above with respect to claim 1, Applicant submits that method claim 23 is also patentable.

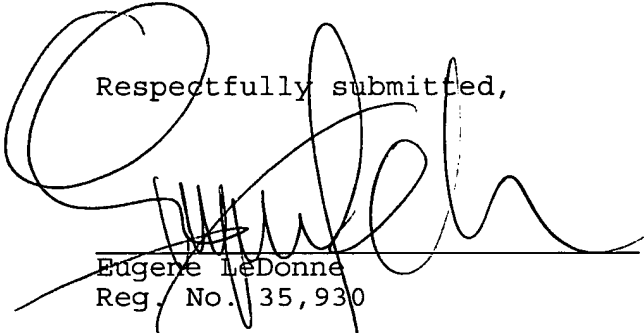
Independent claim 24 has been amended to incorporate the content of claim 32. Claim 24 now recites that the media contains chamber walls to localize the electrophoretic particles. None of the cited references teach or suggest such a novel feature.

Dependent claims 25-31 and claims 33-41 are patentable at least by virtue of their dependency from claim 24.

As for claims 42 and 43, they are directed to a method of manufacturing a media containing electrophoretic particle suspension. Although the cited references do disclose how to record images on such a media, none of the cited references teach or suggest *how to manufacture* the media.

Based upon the above amendments and remarks, Applicant respectfully requests reconsideration of this application and its earlier allowance. Should the Examiner feel that a telephone conference with Applicant's attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

Respectfully submitted,



Eugene LeDonne
Reg. No. 35,930

REED SMITH LLP
599 Lexington Avenue
New York, NY 10022-7650
(212) 521-5402

Attorney for Applicants

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